

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: METALUX

Report Number: P271922

Luminaire Tested: **14CZ2-48HE-UNV-L935-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P271922
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-48HE-UNV-L935-CD1-U
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (196) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4078.0 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

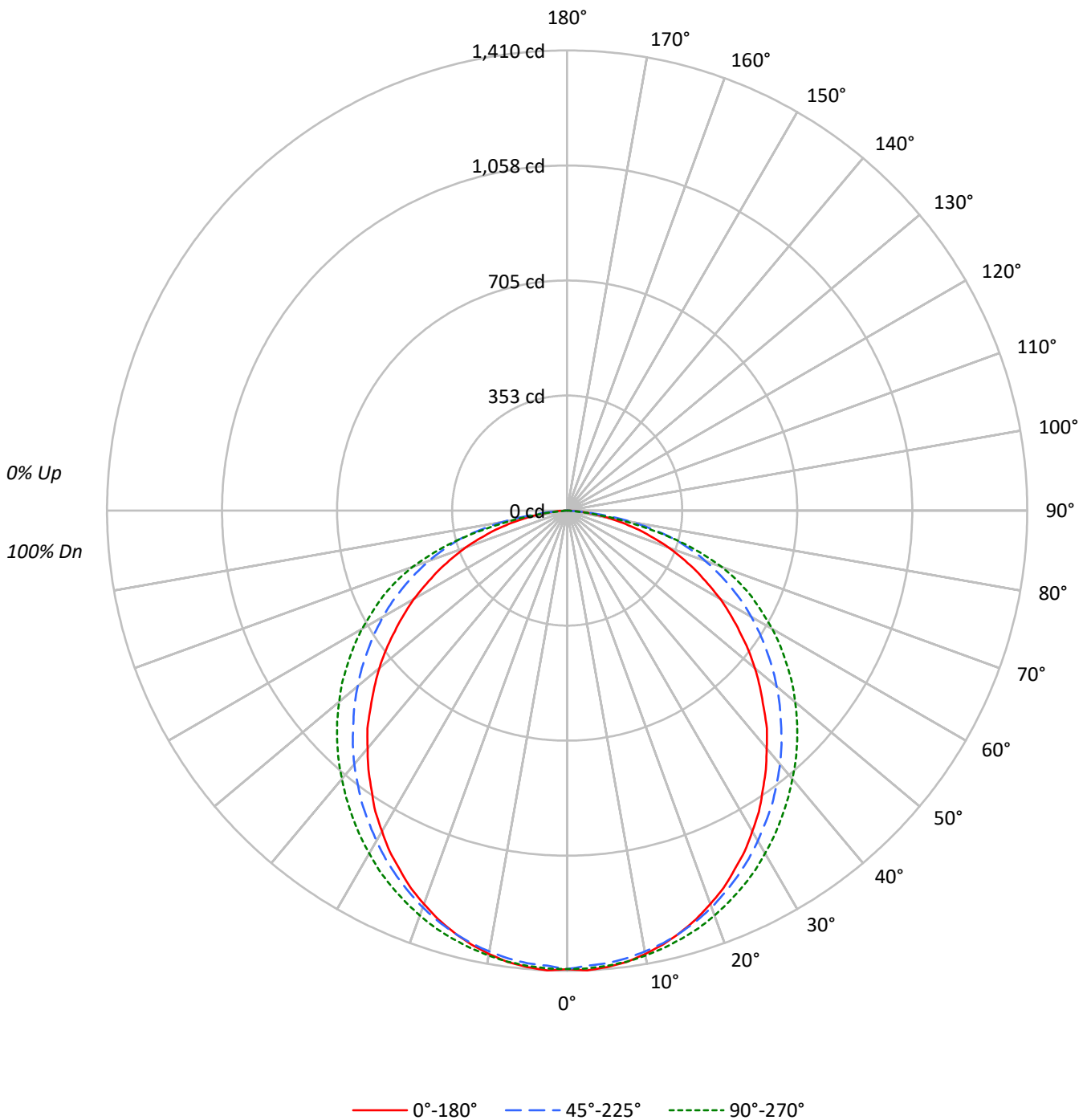
Input Watts (W): 36.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3781	3781	3781
5°	3793	3761	3783
10°	3769	3749	3784
15°	3729	3731	3782
20°	3674	3705	3781
25°	3604	3669	3777
30°	3526	3631	3769
35°	3432	3599	3767
40°	3341	3565	3772
45°	3239	3526	3793
50°	3144	3510	3818
55°	3025	3498	3852
60°	2916	3504	3905
65°	2768	3515	3966
70°	2597	3541	3964
75°	2354	3573	3583
80°	1931	3085	2551
85°	1433	1460	590



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.9	3.3
10°-20°	379.8	9.3
20°-30°	572.1	14.0
30°-40°	686.5	16.8
40°-50°	715.5	17.5
50°-60°	662.4	16.2
60°-70°	535.2	13.1
70°-80°	326.3	8.0
80°-90°	67.4	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1084.8	26.6
0°-40°	1771.2	43.4
0°-60°	3149.1	77.2
0°-90°	4078.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4078.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1405	1405	1405	1405	1405	
5°	1404	1400	1392	1402	1400	133
15°	1338	1339	1339	1358	1358	377
25°	1214	1221	1236	1267	1272	560
35°	1045	1061	1096	1136	1147	654
45°	851	877	927	978	997	658
55°	645	678	746	804	821	578
65°	435	477	552	607	623	430
75°	226	276	344	349	345	238
85°	46	69	47	26	19	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1404.9	1404.9	1404.9	1404.9	1404.9
2.5°	1410.3	1405.8	1395.8	1405.8	1404.0
5°	1404.0	1400.3	1392.2	1402.2	1400.3
7.5°	1394.9	1391.2	1384.0	1395.8	1394.0
10°	1379.4	1377.6	1372.1	1385.8	1384.9
12.5°	1361.2	1360.3	1357.6	1373.1	1372.1
15°	1338.5	1339.4	1339.4	1357.6	1357.6
17.5°	1313.0	1314.9	1318.5	1338.5	1341.2
20°	1283.0	1286.7	1293.9	1316.7	1320.3
22.5°	1252.1	1254.8	1265.8	1293.0	1296.7
25°	1213.9	1221.2	1235.8	1266.7	1272.1
27.5°	1177.6	1183.9	1203.9	1235.8	1244.8
30°	1134.8	1144.8	1168.5	1203.0	1213.0
32.5°	1093.9	1104.8	1132.1	1172.1	1181.2
35°	1044.8	1061.2	1095.7	1135.7	1146.6
37.5°	1000.2	1015.7	1054.8	1098.4	1111.2
40°	951.1	970.2	1014.8	1061.2	1073.9
42.5°	905.7	923.9	972.1	1019.3	1036.6
45°	851.1	876.6	926.6	978.4	996.6
47.5°	801.1	826.6	883.8	939.3	955.7
50°	751.1	778.4	838.4	895.7	912.0
52.5°	699.3	728.4	792.9	850.2	869.3
55°	644.7	678.3	745.6	803.8	821.1
57.5°	592.9	627.4	699.3	758.4	775.6
60°	541.9	577.4	651.1	707.4	725.6
62.5°	485.6	527.4	603.8	659.2	672.9
65°	434.7	477.4	552.0	607.4	622.9
67.5°	381.0	427.4	501.9	552.9	567.4
70°	330.1	378.3	450.1	497.4	503.8
72.5°	275.5	324.6	397.4	427.4	427.4
75°	226.4	276.4	343.7	349.2	344.6
77.5°	172.8	228.2	271.9	261.0	250.1
80°	124.6	179.1	199.1	179.1	164.6
82.5°	83.7	130.0	120.0	95.5	84.6
85°	46.4	69.1	47.3	26.4	19.1
87.5°	17.3	15.5	4.5	4.5	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)